

filed 3/31/04

FTO/SB/08a (05-03)

Approved for use through 04/30/2003. OMB 0551-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 3

Complete if Known

Application Number	09/617,494
Filing Date	July 14, 2000
First Named Inventor	Jin-Meng Ho et al.
Art Unit	2685-2664
Examiner Name	Huy-Duy Vu SHAH.C
Attorney Docket Number	003493.00082

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
C.S.		US-5,012,489	04-30-1991	Sardana	
		US- 5,717,988	02-10-1998	Belanger et al.	
		US- 5,787,080	07-28-1998	Hulyalker et al.	
		US- 5,948,768	09-07-1999	Citta et al.	
		US- 5,980,000	09-28-1999	Ruszczyk et al.	
		US- 5,978,382	11-02-1999	Citta et al.	
		US- 6,034,987	09-07-2000	Citta et al.	
		US- 6,169,748	01-02-2001	Barbas et al.	
		US- 6,226,277	05-01-2001	Chuah	
		US- 6,236,656	05-22-2001	Westerberg et al.	
		US- 6,282,976	07-17-2001	McNamara	
		US- 6,263,204	07-17-2001	Kuseld et al.	
		US- 6,285,888	09-04-2001	Kamel et al.	
		US- 6,317,438	11-13-2001	Trebes, Jr.	
		US- 6,356,856	03-12-2002	Rakib et al.	
		US- 6,370,153	04-09-2002	Eng	
		US- 6,377,548	04-23-2002	Chuah	
		US- 6,452,915	09-17-2002	Jorgensen	
		US- 6,469,991	10-22-2002	Chuah	
		US- 6,501,741	12-31-2002	Millicone et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
C.S.		JP 02072738 A	08-1990	Kurokawa, Takatsugu		

Examiner Signature		Date Considered	9/28/04
--------------------	--	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 808. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/88/08a (05-03)

Approved for use through 04/30/2003. OMB 051-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no person is required to respond to a collection of information unless it contains a valid OMB control number.

(Substitute for form 1449A/PTO)

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

2

of

3

Complete if Known

Application Number	08/617,494
Filing Date	July 14, 2000
First Named Inventor	Jin-Meng Ho et al.
Art Unit	2665 2664
Examiner Name	Huy-Duy Vu SHAH.C
Attorney Docket Number	003493.00082

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. 1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
C.G.S.		US- 6,515,972	02-04-2003	Gage et al.	
		US-6,519,482	02-11-2003	Lu et al.	
		US- 6,538,989	03-25-2003	Carter et al.	
		US- 6,542,480	04-01-2003	Ahmadvand et al.	
		US- 6,567,408	05-20-2003	Li et al.	
		US- 6,567,416	05-20-2003	Chuah	
		US- 6,577,609	06-10-2003	Sharoni	
		US- 6,587,487	07-01-2003	Mikkonen	
		US- 6,587,486	07-01-2003	Dampo	
		US- 6,590,885	07-08-2003	Jorgensen	
		US- 6,600,744	07-29-2003	Carr et al.	
		US- 6,625,158	08-23-2003	Shalo et al.	
		US- 6,631,122	10-07-2003	Arunachalam et al.	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. 1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
		Country Code ⁴ - Number ⁴ - Kind Code ² (if known)				

Examiner
Signature

Date

Considered

9/28/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-0189 and select option 2.

PTO/SB/06b(05-03)

Approved for use through 04/30/2003. OMB 0161-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

(Substitute for form 1449A/PTO)

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 3 of 3

Complete If Known

Application Number	09/817,484
Filing Date	July 14, 2000
First Named Inventor	Jin-Meng Ho et al.
Group Art Unit	4885-2664
Examiner Name	Huy-Duy Vu SHAW.C
Attorney Docket Number	003493.00082

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2
C.S.		Aad, Inat & Castelluccio, Claude, "Introducing Service Differentiation into IEEE 802.11", IEEE, 2000, pages 438-443.	
		Ganz, Aura & Wongthaveerawat, Kitt, "IEEE 802.11 Wireless LAN Association Procedure for Multimedia Applications", IEEE, 1999, pages 1287-1291.	
		Ho, Jin-Meng & Lin, Wei, "IEEE 802.11 Wireless LANs, MediaPlus-An IEEE 802.11 Enhanced Protocol for QoS-Driven Wireless LANs", AT&T, November 2000, pages 1-25.	
		Gong, Zhijun et al., "QoS Guaranteed Wireless LAN" International Conference on Communication Technology, ICCT, October 22-24, 1998.	
		Cell, F. et al., "IEEE 802.11 Wireless LAN: Capacity Analysis and protocol Enhancement", IEEE 1998.	
		Deng, Dr-Junn & Chang, Ruay-Shiung, "A Priority Scheme for IEEE 802.11 DCF Access Method", IEEE Trans. Commun., Vol. 45, No. 1, January 1998.	

Examiner Signature		Date Considered	9/28/04
--------------------	--	-----------------	---------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1. Applicant's unique citation designation number (optional). 2. Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FILES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

file 8/8/02

Sheet 1 of 1

PTO-1449 (Modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT	ATTY. DOCKET NO.	SERIAL NUMBER
	003493.00082	09/617,494
	APPLICANT	
	Jin-Meng HO et al.	
	FILING DATE	GROUP ART UNIT
	July 14, 2000	2665 2664

U.S. PATENT DOCUMENTS

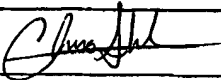
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE
C.G.S.	6,049,549	4/11/2000	Ganz et al.			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES/NO
C.G.S.	WO 00/31929	6/2/2000	PCT			
C.G.S.	EP 0 853 407 A2	7/15/1998	EP			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	N. Ek, "IEEE 802.1 P,Q - QoS on the MAC level," 24 April 1999, XP000864158 Retrieved from the Internet: URL: http://www.tml.hut.fi/Opinnot/Tik-110.551/1999/papers/08IEEE802.1QosInMac/qos.html retrieved 6/27/2002, paragraphs 0003 - 0006
	Y. Drabu, "A survey of QoS techniques in 802.11", Internet 'Online! January 1999, XP000864159, Retrieved from the Internet: URL: http://trident.mcs.kent.edu/~ydrabu/research/wmac/mac.pdf , retrieved on 6/27/2002, paragraphs 0001 - 03.21, 0004 - 4.2.1

EXAMINER 	DATE CONSIDERED 9/28/04
EXAMINER: Initial citation if reference was considered. Draw line through citation if not in conformance to MPEP 609 and not considered. Include copy of this form with next communication to applicant.	

Ids w/1449 form filed: August 8, 2002